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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/803,511	03/09/2001	Jae Beom Han	2598/01395	6128

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DARBY & DARBY P.C
805 Third Avenue
New York, NY 10022

EXAMINER

HODGES, MATTHEW P

ART UNIT PAPER NUMBER

2879

DATE MAILED: 08/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/803,511

Applicant(s)

HAN ET AL.

Examiner

Matt P Hodges

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

The Amendment, filed on 5/30/2003, has been entered and acknowledged by the Examiner.

Claim Objections

Claims 5 and 9 are objected to because of the following informalities: The structural element "printed circuit board" lacks antecedent basis.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 5 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Fujiwara et al. (US 5,225,736).

Regarding claims 5 and 9, Fujiwara discloses (see figure 4 and figure 11) a deflection yoke including a coil separator (47), a horizontal deflection coil (49), a vertical deflection coil (53), a core (51), a rear plate (55), and a neck part. (Column 6 line 65 to Column 7 line 20). The printed circuit board is not shown in the drawing but is inherent and well known in the art. Further Fujiwara discloses (see figure 26) two magnetic compensating elements (264a and 264b) located on the front plate along the circumference of the neck. (Column 15 lines 4-6).

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The recitations “which compensates convergence on a screen” and “to reinforce the horizontal and vertical magnetic fields of the horizontal and vertical deflection coils” have not been given patentable weight because they are considered an intended used recitation. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6, 7, 10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujiwara et al. (US 5,225,736) in view of Rasmussen et al. (US 6,008,577).

Regarding claims 6, 7, 10, and 11 Fujiwara discloses (see figure 26) the deflection yoke as described in the rejection of claims 5 and 9 above including the use of plates (264a and 264b) wrapped around the neck part in a semi-circular configuration, but does not specifically state the composition of the plates being iron. Fujiwara does state that the plates are composed of an oxide magnetic substance (Column 7 lines 18-20). Rasmussen discloses, in the same field of magnetic focusing of an electron beam, the use of metallic oxides interchangeable with iron as a magnetic substance for the controlling of an electron beam. (Column 4 lines 1-16). It has been held to be within the general skill of a worker in the art to select a known material on the basis of

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its suitability for the intended use as a matter of obvious design choice. Thus, it would have been obvious to one having ordinary skills in the art at the time the invention was made to have used iron instead of a magnetic oxide in the deflection yoke disclosed by Fujiwara, since the selection of known materials for a known purpose is within the skill of the art.

Claims 8 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujiwara et al. (US 5,225,736) in view of Rasmussen et al. (US 6,008,577) and further in view of Shin (US 5,150,003).

Regarding claims 8 and 12, Fujiwara in view of Rasmussen (see the rejection of claims 6, and 10 above) teach the deflection yoke as claimed but do not specifically state the use of an adherence to bond the plates to the deflection yoke. However Shin, in the same field of endeavor, discloses (see figure 1), the use of an adherence to bond the metal plates to the front plate. (Column 3 lines 15-20). The use of an adherence allows for dynamically placed pieces after the manufacture of the deflection yoke to account for any manufacturing discrepancies. (Column 1 lines 55-59). Thus, it would have been obvious at the time the invention was made to a person having ordinary skills in the art to incorporate the use of an adherence to the magnetic plates taught by Fujiwara in view of Rasmussen so as to allow for dynamic placement of the plates for optimal manufacturing flexibility.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Response to Arguments

Applicant's arguments filed 05/30/2003 have been fully considered but they are not persuasive.

Regarding applicants claim that the term magnetic material does not include magnetic members in the art of deflection yokes, examiner respectfully disagrees. Examiner contends that the term magnetic material is broadly defined as any element that is of or relating to magnetism or magnets and thereby includes magnets.

Regarding applicants claim that Fujiwara does not appear to specify the use of the magnetic elements to correct convergence problems, examiner respectfully disagrees. Fujiwara discloses the use of the magnetic members to reduce deflective aberration formed by the deflection yoke. The reduction of deflection aberration effectively enhances convergence of the beams on the intended beam spot and thereby reduces associated errors.

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Regarding applicants claim that Rasmussen does not address the supposed deficiencies of Fujiwara, examiner respectfully disagrees. Rasmussen addresses the use of various alternative compositions for magnetic material including iron thus establishing the state of the art at the time the invention was made.


Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matt P Hodges whose telephone number is (703) 305-4015. The examiner can normally be reached on 7:30 AM to 4:00 PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (703) 305-4794. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7382 for regular communications and (703) 308-7382 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

mph 
August 11, 2003


ASHOK PATEL
PRIMARY EXAMINER